

AMENDMENTS TO THE SPECIFICATIONIN THE SPECIFICATION:

Please replace the paragraphs beginning on page 6 with the following amended paragraphs:

It can be seen in Fig. 5 that angle-ply materials are applied in Steps 1 and 2 of the representative process to form a torsionally stiff inner core and (indicated generally at 30 in Figs. 2 and 3) reinforced end portions of the shaft and zero-ply materials are applied in Steps 3, 4 and 5 to form a longitudinally stiff outer shell indicated at 3531 around the core 30. The specific amounts and types of materials are selected by the designer to produce the desired weight and bending profile of a particular shaft. Of course, the total amount of all materials in the shaft determines the weight of the shaft, while the zero-ply materials are primarily determinative of longitudinal stiffness, these being two of the most important characteristics in shaft design. Shaft designers have many approaches to the production of the most effective and desirable shafts, varying the amounts, types and placement of materials in efforts to achieve optimum results.

In accordance with the present invention, a family of golf club shafts is provided with greatly varying weights and having the same longitudinal stiffness/bending profile by using the same amount and types of zero-ply materials in each shaft of the family, varying the amounts and weights of the angle-ply materials by a selected amount in each shaft to provide an incremental step from shaft to shaft in the family, and shifting the shaft along the taper profile by an amount and in a direction that will compensate for the change in O.D. of the core 30 produced by the difference in the amount of angle-ply material used in the core, thereby maintaining the inside diameter ("I.D.") and, consequently the O.D., of the shell 331, to maintain its stiffness. This can

be accomplished conveniently on the same mandrel 15 by moving the wrap a calculated distance along the taper profile (toward the larger end when the amount of core material has been decreased), or can be done on a different mandrel having the same taper profile.

Please replace the paragraph beginning on page 7 with the following amended paragraph:

To illustrate the process, it can be assumed that the shaft 10 shown in the drawings and Fig. 5 is a "75 gram" shaft, and that the tip edges of the materials are positioned on the mandrel 15 a distance " χ " from the end of the taper profile. To produce a "65 gram" shaft 10, ten grams of weight will be removed from the angle-ply materials in Step 2 of Fig. 5 and the wrap will be moved ~~down up~~ the taper profile, to the ~~right left~~ in Fig. 5, by a distance " γ " sufficient to adjust the O.D. of the lighter core to be substantially the same as the O.D. of the heavier core 30. For example, depending upon the specific taper profile, " χ " may be calculated to be in the range of 2.0 to 3.0 inches, and " γ " may be in the range of 4.0 to 5.0 inches. Then the process is repeated with the other steps remaining the same. It is to be understood that, for heavier or lighter shafts in the family, the taper profile may be extended onto a different mandrel (not shown). It also is to be understood that the number of wraps of materials illustrated will be widely variable according to the types of materials selected and used, some fibers being heavier and larger to form thicker layers in the shaft, and some being finer and smaller so that substantially more layers are used. Heavier materials may be limited to ten or fewer layers, while finer materials may have as many as fifteen, twenty or more layers.

Please replace the paragraph beginning on page 9 with the following amended paragraph:

It should be noted that the representative finish wrap 28 on the tip will be moved up the profile to protect the ~~top tip~~ end of the shell 31 from damage in the final grinding of the tip to the desired O.D. for mounting of a club head. The increase in the O.D. of the tip wrap in larger diameter (lighter) shafts will result in more material removal during grinding to the desired O.D., with resulting further reduction in total weight. It also will be understood that lighter shafts will have correspondingly reduced torsional stiffness.